Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

911 South Primrose Avenue • Suite K
Monrovia, California 91016 USA

626.256.6662 800.477.7411
Fax 626.256.6263

December 31, 2004
DELTA Project PA8901A-1

Mr. Arman Toumari
State of California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013-1104

Re: FOURTHQUARTER 2004 GROUNDWATER MONITORING REPORT
Shell Service Station
8901 South Atlantic Boulevard
South Gate, California

Dear Mr. Toumari:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (SHELL), Delta Environmental Consultants, Inc. (DELTA), has prepared this *Fourth Quarter 2004 Groundwater Monitoring Report* for the above referenced site.

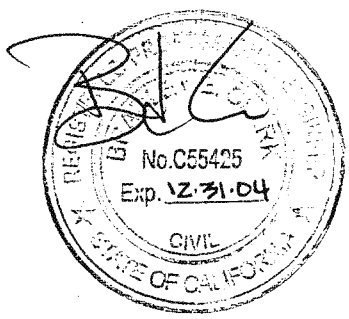
This quarterly report represents DELTA's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between DELTA and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of DELTA's Client and anyone else specifically listed on this report. DELTA will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, DELTA makes no express or implied warranty as to the contents of this report.

If you have any questions regarding this site, please contact Mr. Brad Clark (DELTA) at (626) 256-6662 or Mr. Joe Lentini (SHELL) at (310) 376-0649.

Sincerely,
Delta Environmental Consultants, Inc.

Gretchen Tagavilla
Project Associate

Bradley E. Clark, P.E. C55425
Senior Project Engineer



Attachments: Fourth Quarter 2004 Groundwater Monitoring Report

cc: Mr. Joe Lentini, Shell Oil Products US
Mr. Tim Smith, Los Angeles Department of Public Works

December 31, 2004

SHELL QUARTERLY STATUS REPORT

Station Address.:	8901 S. Atlantic Blvd., South Gate
DELTA Project No.	PA8901A-1
SHELL Environmental Engin./Phone No.:	Joe Lentini/(310) 376-0649
DELTA Site Manager/Phone No.:	Gretchen Tagavilla/(626) 256-6662
Primary Agency/Regulatory ID No.:	LARWQCB/ Arman Toumari
Other Agencies to Receive Copies:	LADPW/ Tim Smith

WORK PERFORMED THIS QUARTER (FOURTH - 2004):

1. Quarterly groundwater monitoring and sampling. Submitted quarterly report.

WORK PROPOSED FOR NEXT QUARTER (FIRST - 2005):

1. Quarterly groundwater monitoring and sampling.
2. Submit quarterly report.

Current Phase of Project:	Groundwater monitoring
Frequency of Sampling:	Quarterly
Frequency of Monitoring:	Quarterly
Is Separate Phase Hydrocarbon Present On-site (Well #'s):	☐ Yes ☒ No
Cumulative SPH Recovered to Date :	NA
SPH Recovered This Quarter :	None
Sensitive Receptor(s) and Respective Direction(s):	Nearest production well, Well 07 (02S/12W-31M02 S), is approximately 867 feet northeast of the site.
Current Remediation Techniques:	None
Permits for Discharge:	None
Approximate Depth to Groundwater:	43.22' to 43.69'
Groundwater Gradient	Northwest @ approximately 0.0125 ft/ft
Current Agency Correspondence:	LADPW letter dated October 9, 2003.
Summary of Unusual Activity:	None

Gretchen Tagavilla

Gretchen Tagavilla
Site Manager (DELTA)

ATTACHED:

- Table 1 – Groundwater Gauging and Analytical Results
- Figure 1 – Site Location Map
- Figure 2 – Groundwater Elevation Contour Map
- Figure 3 – Hydrocarbon Distribution in Groundwater Map
- Figure 4 – TPH-G Concentration Map
- Figure 5 – Benzene Concentration Map
- Figure 6 – MTBE Concentration Map
- Appendix A – Field Data Sheets
- Appendix B – Field Procedures
- Appendix C – Waste Disposal Document
- Appendix D – Laboratory Report and Chain-of-Custody Documents

TABLE

TABLE 1
GROUNDWATER GAUGING AND ANALYTICAL RESULTS
SHELL SERVICE STATION
8901 South Atlantic Boulevard, South Gate, California

DATE	DEPTH TO GW (feet)	SPH THICKN. (feet)	GW ELEV. (feet relative to MSL)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE 8260 (ug/L)	TBA 8260 (ug/L)	DIPE 8260 (ug/L)	ETBE 8260 (ug/L)	TAME 8260 (ug/L)	ETHANOL (ug/L)	COMMENTS
MW-1	**Top of casing elevation (ft): 111.78**														
9/26/2001	NM	NM		510	27	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<250	490	ND<10	ND<10		
7/31/2002	40.61	0.00	71.17	200	24	ND<1.0	1.0	ND<1.0	ND<1.0	NA	NA	NA	NA		
12/18/2002	41.20	0.00	70.58	130	17	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	56	ND<2.0	ND<2.0		
3/26/2003	42.66	0.00	69.12	150	15	ND<1.0	2.4	ND<1.0	ND<1.0	ND<10	16	ND<2.0	ND<2.0		No purge sample
6/23/2003	43.70	0.00	68.08	98	11	ND<1.0	1.7	ND<1.0	ND<1.0	ND<10	12	ND<2.0	ND<2.0		No purge sample
9/5/2003	42.77	0.00	69.01	140	14	ND<1.0	2.5	ND<1.0	ND<1.0	ND<10	17	ND<2.0	ND<2.0	ND<100	No purge sample
11/20/2003	42.07	0.00	69.71	100	10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	25	ND<2.0	ND<2.0	ND<100	
2/23/2004	42.12	0.00	69.66	91	7.9	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	27	ND<2.0	ND<2.0	ND<100	
5/4/2004	42.44	0.00	69.34	ND<50	1.4	ND<1.0	ND<1.0	ND<1.0	1.3	ND<10	8.5	ND<2.0	ND<2.0	ND<100	
8/16/2004	42.75	0.00	69.03	70	6.3	ND<1.0	ND<1.0	ND<1.0	1.9	ND<10	28	ND<2.0	ND<2.0	ND<100	
11/30/2004	43.25	0.00	68.53	68	5.2	ND<1.0	ND<1.0	ND<1.0	1.7	ND<10	25	ND<2.0	ND<2.0	ND<100	
MW-2	**Top of casing elevation (ft): 110.30**														
9/26/2001	NM	NM		ND<100	1.8	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<50	ND<2.0	ND<2.0	ND<2.0		
7/31/2002	41.35	0.00	68.95	ND<50	2.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	NA	NA	NA	NA		
12/18/2002	41.85	0.00	68.45	ND<50	1.3	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	2.9	ND<2.0	ND<2.0		
3/26/2003	42.31	0.00	67.99	85	1.8	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
6/23/2003	42.38	0.00	67.92	74	1.4	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
9/5/2003	42.73	0.00	67.57	93	1.2	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	No purge sample
11/20/2003	42.75	0.00	67.55	53	0.98	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
2/23/2004	42.69	0.00	67.61	61	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
5/4/2004	43.10	0.00	67.20	ND<50	0.56	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
8/16/2004	43.35	0.00	66.95	51	0.72	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
11/30/2004	43.69	0.00	66.61	ND<50	0.81	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
MW-3	**Top of casing elevation (ft): 110.35**														
9/26/2001	NM	NM		ND<100	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<50	ND<2.0	ND<2.0	ND<2.0		
7/31/2002	40.31	0.00	70.04	ND<50	2.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	NA	NA	NA	NA		
12/18/2002	41.10	0.00	69.25	ND<50	1.6	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	6.0	ND<2.0	ND<2.0		
3/26/2003	41.59	0.00	68.76	ND<50	0.85	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
6/23/2003	41.58	0.00	68.77	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
9/5/2003	42.41	0.00	67.94	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	No purge sample
11/20/2003	42.05	0.00	68.30	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	17	ND<2.0	ND<2.0	ND<100	
2/23/2004	42.09	0.00	68.26	ND<50	8.4	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	28	ND<2.0	ND<2.0	ND<100	
5/4/2004	42.42	0.00	67.93	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	24	ND<2.0	ND<2.0	ND<100	
8/16/2004	42.77	0.00	67.58	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	30	ND<2.0	ND<2.0	ND<100	
11/30/2004	43.27	0.00	67.08	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	21	ND<2.0	ND<2.0	ND<100	

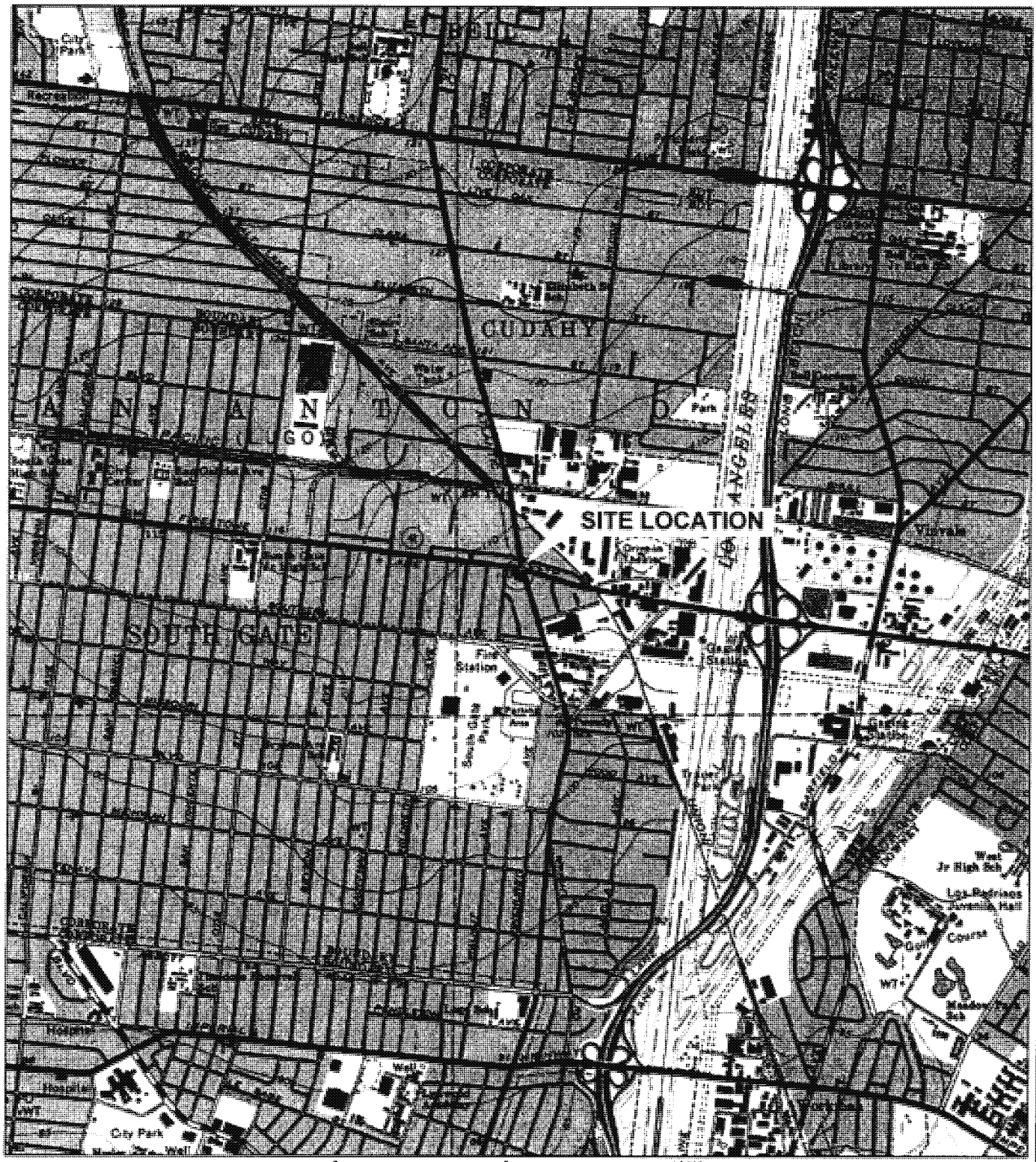
TABLE 1
GROUNDWATER GAUGING AND ANALYTICAL RESULTS
SHELL SERVICE STATION
8901 South Atlantic Boulevard, South Gate, California

DATE	DEPTH TO GW (feet)	SPH THICKN. (feet)	GW ELEV. (feet relative to MSL)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE 8260 (ug/L)	TBA 8260 (ug/L)	DIPE 8260 (ug/L)	ETBE 8260 (ug/L)	TAME 8260 (ug/L)	ETHANOL (ug/L)	COMMENTS
MW-4	**Top of casing elevation (ft): 111.38**														
9/26/2001	NM	NM		ND<100	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<50	**3.1**	ND<2.0	ND<2.0		
7/31/2002	40.71	0.00	70.67	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	NA	NA	NA	NA		
12/18/2002	44.20	0.00	67.18	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		
3/26/2003	41.64	0.00	69.74	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		
6/23/2003	41.74	0.00	69.64	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
9/5/2003	42.20	0.00	69.18	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0		No purge sample
11/20/2003	42.10	0.00	69.28	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	No purge sample
2/23/2004	42.22	0.00	69.16	ND<50	**0.80**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	**3.2**	ND<2.0	ND<2.0	ND<100	
5/4/2004	42.67	0.00	68.71	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
8/16/2004	42.81	0.00	68.57	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	
11/30/2004	43.22	0.00	68.16	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	**2.2**	ND<2.0	ND<2.0	ND<100	

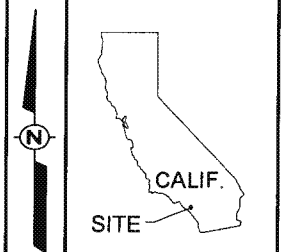
Notes:
GW - groundwater
SPH - separare-phase hydrocarbons
MSL - mean sea level
NA - not Analyzed
ND - not detected
NM - Not Measured
ug/L - parts per billion
TPH-G - total petroleum hydrocarbons as gasoline using either EPA Method 8015M or the DHS LUFT Method
MTBE - methyl-tert butyl ether
TBA - tert-butyl alcohol
DIPE - di-isopropyl ether
ETBE - ethyl-tert butyl ether
TAME - tert-amyl methyl ether
Survey data provided by KHM Environmental Management, Inc.

FIGURES

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
LUI 04/17/03			PA8901A-1



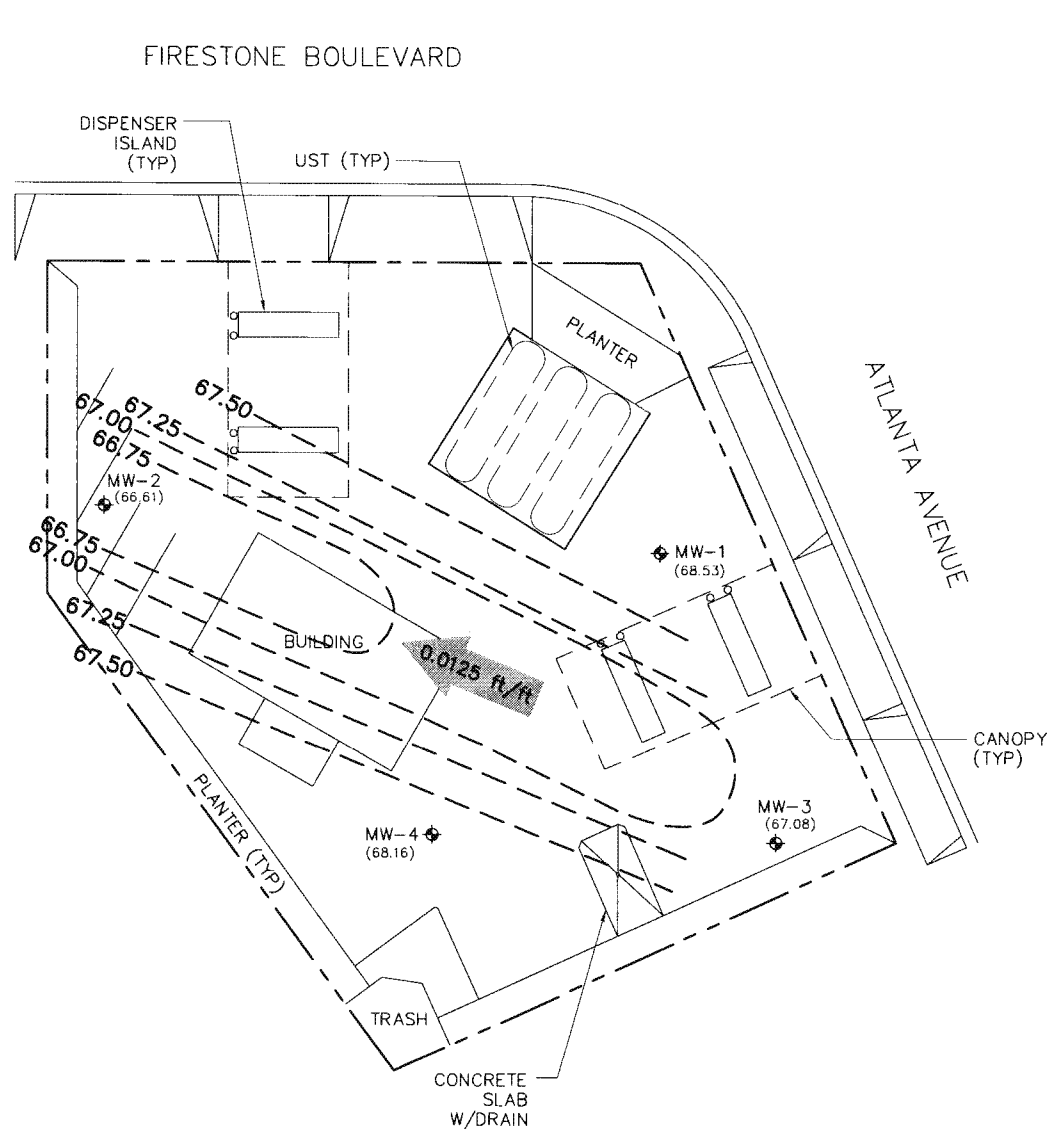
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)



DELTA
ENVIRONMENTAL
CONSULTING INC.

SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 1
SITE LOCATION MAP
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA



N
W E
S

LEGEND

MW-1 ◆	GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
(68.53)	GROUNDWATER ELEVATION IN FEET ABOVE SEA LEVEL (ft/MSL)
66.75 – — –	GROUNDWATER ELEVATION CONTOUR
	CONTOUR INTERVAL = 0.25 FEET
0.0033 ft/ft	APPROXIMATE GROUNDWATER FLOW DIRECTION

0 25 50
SCALE IN FEET

Delta
ENVIRONMENTAL CONSULTANTS INC.

SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP
11/30/04
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA

PROJECT NUMBER PA8901A-1
APPROVED BY
CHECKED BY
DRAWN BY LJJ

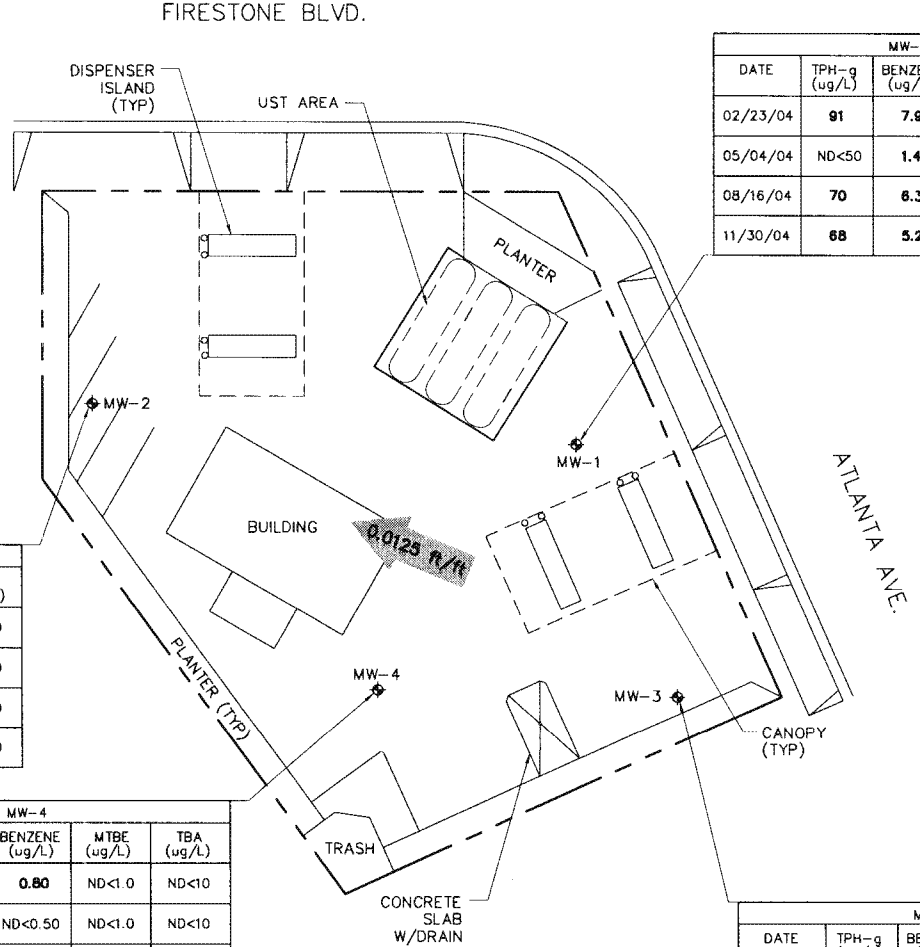
Y:_Shell Sites\8\8901 S. Atlantic\2004-12-31_4Q04 GW Monitoring Report\Figure 2(8901)_GW ELEVATION CONTOUR MAP.dwg, Model, 12/15/2004 11:45:45 AM

PROJECT NUMBER PA8901A-1

APPROVED BY

CHECKED BY

DRAWN BY LUI



MW-1				
DATE	TPH-g (ug/L)	BENZENE (ug/L)	MTBE (ug/L)	TBA (ug/L)
02/23/04	**91**	**7.9**	ND<1.0	ND<10
05/04/04	ND<50	**1.4**	**1.3**	ND<10
08/16/04	**70**	**6.3**	**1.9**	ND<10
11/30/04	**68**	**5.2**	**1.7**	ND<10

MW-2				
DATE	TPH-g (ug/L)	BENZENE (ug/L)	MTBE (ug/L)	TBA (ug/L)
02/23/04	**61**	ND<.0.50	ND<1.0	NO<10
05/04/04	ND<50	**0.56**	ND<1.0	ND<10
08/16/04	**51**	**0.72**	ND<1.0	ND<10
11/30/04	ND<50	**0.81**	ND<1.0	ND<10

MW-4				
DATE	TPH-g (ug/L)	BENZENE (ug/L)	MTBE (ug/L)	TBA (ug/L)
02/23/04	ND<50	**0.80**	ND<1.0	ND<10
05/04/04	ND<50	ND<0.50	ND<1.0	ND<10
08/16/04	ND<50	ND<0.50	ND<1.0	ND<10
11/30/04	ND<50	ND<0.50	ND<1.0	ND<10

MW-3				
DATE	TPH-g (ug/L)	BENZENE (ug/L)	MTBE (ug/L)	TBA (ug/L)
02/23/04	ND<50	**8.4**	ND<1.0	ND<10
05/04/04	ND<50	ND<0.50	ND<1.0	ND<10
08/16/04	ND<50	ND<0.50	ND<1.0	ND<10
11/30/04	ND<50	ND<0.50	ND<1.0	ND<10

N

W E

S

LEGEND

MW-1 ◆ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

TPH-g = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

MTBE = METHYL TERT-BUTYL ETHER

TBA = TERT-BUTYL ALCOHOL

ND< = NOT DETECTED ABOVE LIMIT NOTED

NA = NOT ANALYZED

ug/L = MICROGRAMS PER LITER

0.0125 ft/ft APPROXIMATE GROUNDWATER FLOW DIRECTION

0 30 60

SCALE IN FEET

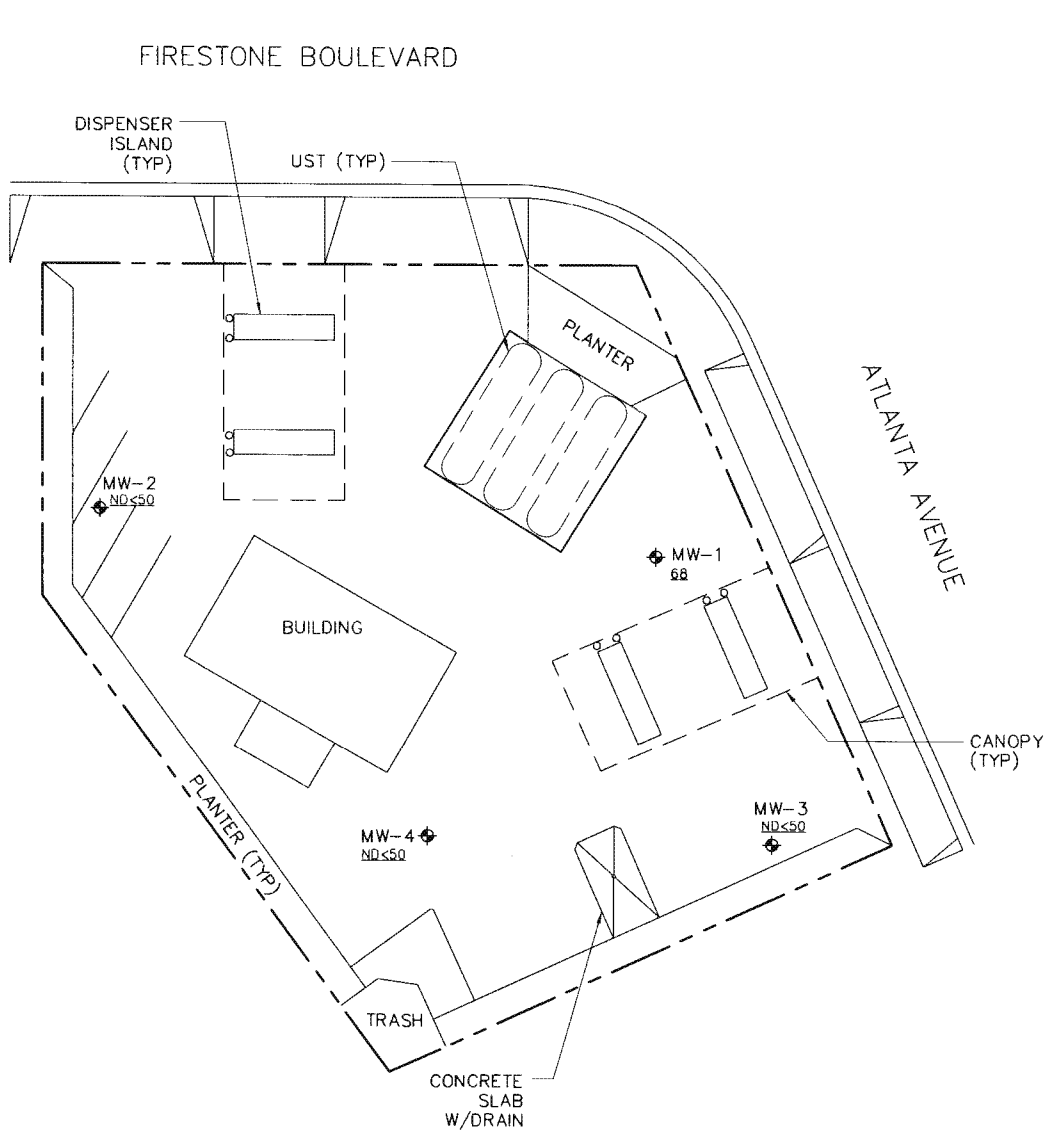
Delta ENVIRONMENTAL CONSULTANTS INC.

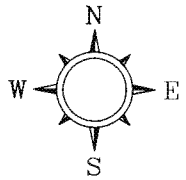
SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 3
HYDROCARBON DISTRIBUTION
IN GROUNDWATER MAP
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA

Y:_Shell Sites\8\8901 S. Atlantic\2004-12-31_4Q04 GW Monitoring Report\Figure 3(8901)_HYDROCARBON DISTRIBUTION IN GW MAP.dwg, Model, 12/14/2004 4:04:43 PM

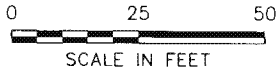
DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
LW			PA8901A-1





LEGEND

MW-1 ⊕	GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
ND<50	TPH-g CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
TPH-g	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
ND	NOT DETECTED

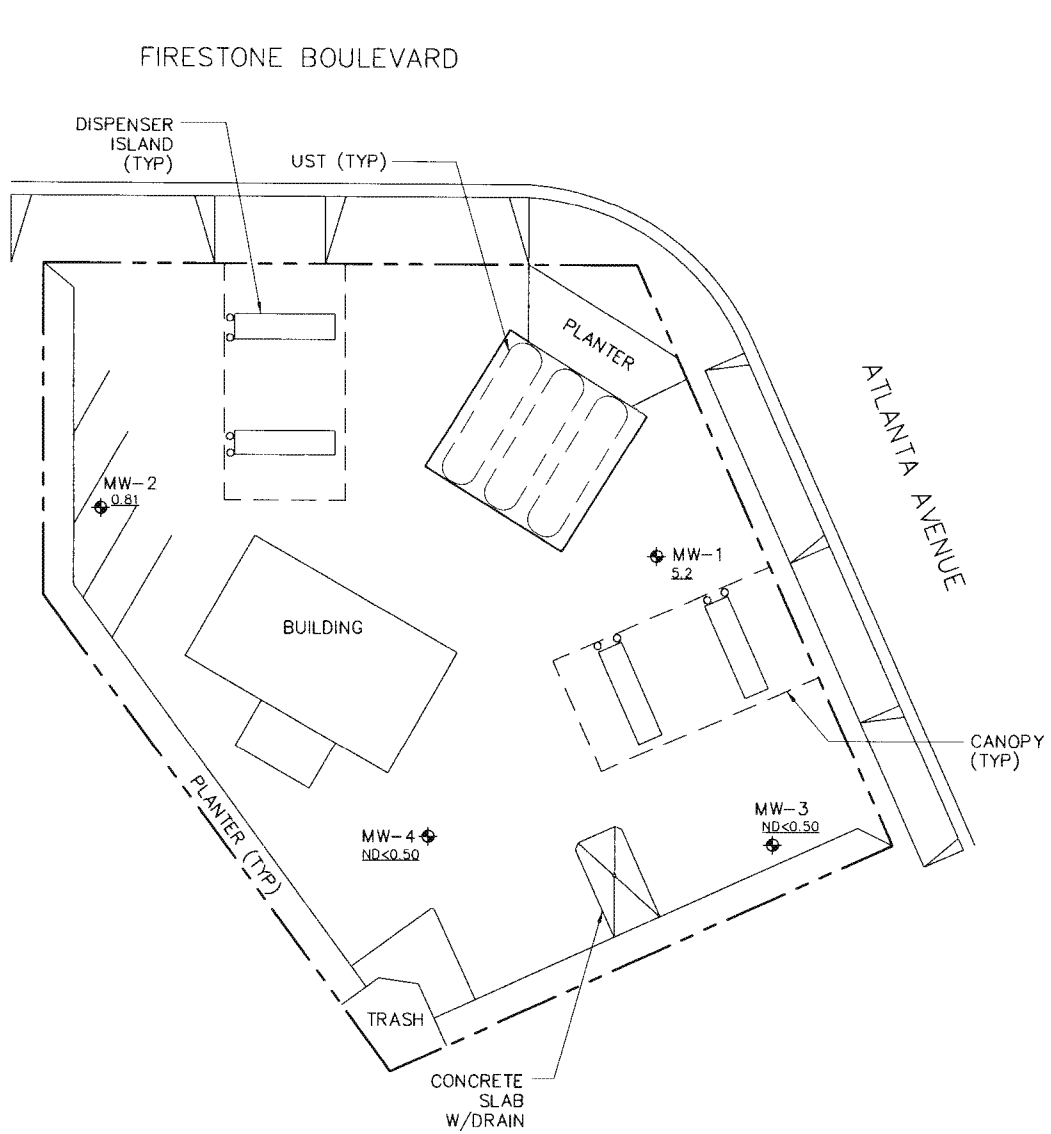


Delta
ENVIRONMENTAL CONSULTANTS INC.

SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 4
TPH-g CONCENTRATION MAP
11/30/04
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA

Y:_Shell Sites\8\8901 S. Atlantic\2004-12-31_4Q04 GW Monitoring Report\Figure 4(8901)_TPH-g CONCENTRATION MAP.dwg, Model, 12/14/2004 4:05:47 PM



N
W E
S

LEGEND

MW-1 ◆ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

5.2 BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)

ND NOT DETECTED

0 25 50
SCALE IN FEET

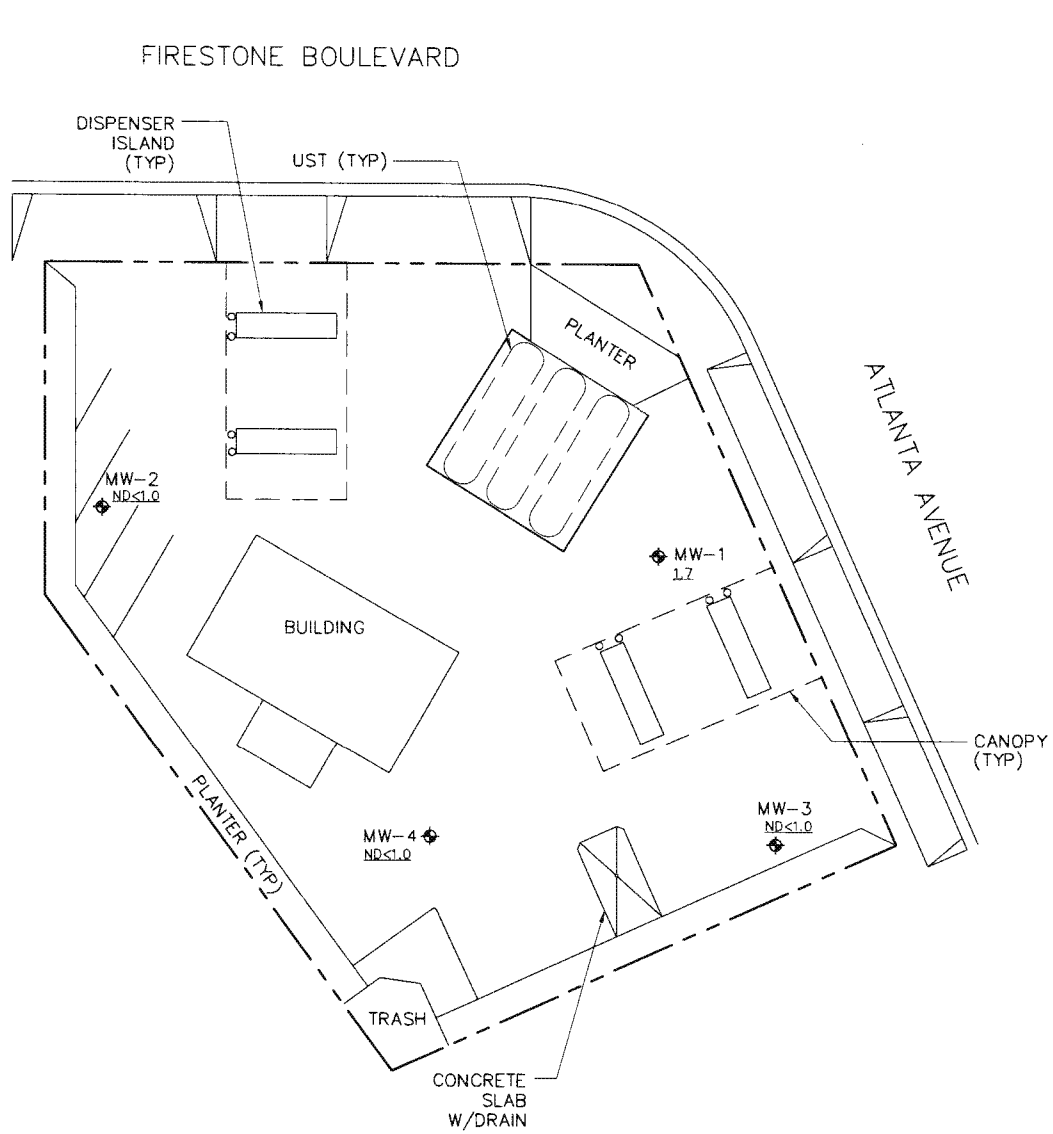
Delta
ENVIRONMENTAL CONSULTANTS INC.

SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 5
BENEZENE CONCENTRATION MAP
11/30/04
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA

PROJECT NUMBER PA8901A-1
APPROVED BY
CHECKED BY
DRAWN BY LW

Y:_Shell Sites\8\8901 S. Atlantic\2004-12-31_4Q04 GW Monitoring Report\Figure 5(8901)_BENZENE CONCENTRATION MAP.dwg, Model, 12/14/2004 4:06:28 PM



N
W E
S

LEGEND

MW-1 ◆	GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
1.7	MTBE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
MTBE	METHYL TERT-BUTYL ETHER
ND	NOT DETECTED

0 25 50
SCALE IN FEET

PROJECT NUMBER	PAB901A-1
APPROVED BY	
CHECKED BY	
DRAWN BY	LUI

Delta ENVIRONMENTAL CONSULTANTS INC.

SHELL OIL PRODUCTS US
SHELL SERVICE STATION
SOUTH GATE, CALIFORNIA

FIGURE 6
MTBE CONCENTRATION MAP
11/30/04
8901 SOUTH ATLANTIC BOULEVARD
SOUTH GATE, CALIFORNIA

Y:_Shell Sites\8\8901 S. Atlantic\2004-12-31_4Q04 GW Monitoring Report\Figure 6(8901)_MTBE CONCENTRATION MAP.dwg, Model, 12/14/2004 4:06:52 PM

APPENDIX A

FIELD DATA SHEETS

WELLHEAD INSPECTION CHECKLIST

Client Shell Date 11/30/04

Site Address 8901 S. Atlantic Ave, South Gate

Job Number 041130-CG1 Technician CG

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1								✓
MW-2		✓				✓		
MW-3						✓		
MW-4	✓							

NOTES: MW-2 replaced 1 9/16" bolt & added 1 9/16" bolt

MW-3 add 1 9/16" bolt

WELL GAUGING DATA

Project # 041130-CG1 Date 11/30/04 Client Shell

Site 8901 S. Atlantic Ave, South Gate

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					43.25	54.45	TOC	
MW-2	2					43.69	55.17		
MW-3	2					43.27	55.00		
MW-4	2					43.22	54.70		

SHELL WELL MONITORING DATA SHEET

BTS #: 041130-CG-1	Site: 97517331
Sampler: CG	Date: 11/30/04
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 54.45	Depth to Water (DTW): 43.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.49	

Purge Method: Bailer; Disposable Bailer; (Positive Air Displacement); Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1.8 (Gals.) X 3 = 5.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
937	68.4	7.5	1788	847	2	
940	69.5	7.4	1809	463	4	
942	69.9	7.4	1814	426	6	

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Date: 11/30/04 Sampling Time: 954 Depth to Water: 45.50

Sample I.D.: MW-1 Laboratory: (CalScience) Columbia Other_____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) Other: Ethanol

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 04130-CG-1	Site: 97517331
Sampler: CG	Date: 11/30/04
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 55.17	Depth to Water (DTW): 43.69
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.98	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

1.8 (Gals.) X 3 = 5.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
918	66.4	7.5	1516	>1000	2	
920	69.0	7.4	1661	578	4	
922	69.5	7.4	1739	737	6	

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Date: 11/30/04 Sampling Time: 1006 Depth to Water: 44.39

Sample I.D.: MW-2 Laboratory: (CalScience) Columbia Other ____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) Other: Ethanol

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 041130-CG-1	Site: 975 17331
Sampler: CG	Date: 11/30/04
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 55.00	Depth to Water (DTW): 43.27
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.61	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1.8 (Gals.) X 3 = 5.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
840	66.9	7.4	1829	71000	2	
842	68.7	7.4	1868	71000	4	
844	69.7	7.4	1876	71000	6	

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Date: 11/30/04 Sampling Time: 903 Depth to Water: 44.30

Sample I.D.: MW-3 Laboratory: (CalScience) Columbia Other_____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) Other: Ethanol

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV	

SHELL WELL MONITORING DATA SHEET

BTS #: 041130-CG1	Site: 9751733
Sampler: CG	Date: 11/30/04
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 54.70	Depth to Water (DTW): 43.22
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 45.51	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: (Bailer); Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

1.8 (Gals.) X 3 = 5.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
821	64.6	7.5	2127	307	2	
823	67.9	7.5	1960	296	4	
826	68.9	7.5	1965	445	5.5	

Did well dewater? Yes (No) Gallons actually evacuated: 5.5

Sampling Date: 11/30/04 Sampling Time: 851 Depth to Water: 44.23

Sample I.D.: MW-4 Laboratory: (CalScience) Columbia Other____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) (Other: Ethanol)

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

APPENDIX B

FIELD PROCEDURES

BLAINE
TECH SERVICES INC

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

December 6, 2004

Joe Lentini
Shell Oil Products US
20945 S. Wilmington Avenue
Carson, CA 90810

Fourth Quarter 2004 Groundwater Monitoring at
Shell-branded Service Station
8901 South Atlantic Avenue
South Gate, CA

Monitoring performed on November 30, 2004

Groundwater Monitoring Report **041130-CG-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to D.K. Environmental.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Francis Thie
Vice President

FT/np

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Gretchen Tagavilla
Delta Environmental Consultants, Inc.
911 S. Primrose Ave., Suite K
Monrovia, CA 91016

BLAINE TECH SERVICES, INC.
METHODS AND PROCEDURES
FOR THE ROUTINE MONITORING OF
GROUNDWATER WELLS AT SHELL SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for Shell comply with Shell's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Shell site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. MMC). No samples are collected from a well containing over two-hundredths of a foot (0.02') of product.

EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not immediately recharge.

MEASURING RECHARGE

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed a minimum of 2 hours to recharge prior to sampling. The water level at time of sampling will be noted.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading documentation to a Blaine Tech Services, Inc. facility before being transported to a Shell approved disposal facility.

SAMPLE COLLECTION DEVICES

All samples are collected using a stainless steel, Teflon or disposable bailers.

SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

TRIP BLANKS

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

DUPLICATES

Duplicates, if requested, may be collected at a site. The Field Technician uses their discretion in choosing the well at which the Duplicate is collected, typically one suspected of containing measurable contaminants. The Duplicate sample is labeled "DUP" and the time of collection is omitted from the COC, thus rendering the sample blind.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

DISSOLVED OXYGEN READINGS

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 54, 58 or 95) or HACH field test kits.

The YSI meters are equipped with a stirring device that enables them to collect accurate in-situ readings. The probe/stirring devices are modified to allow downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated between wells as per the instructions in the operating manual. The probe and stirrer is lowered into the water column. The reading is allowed to stabilize prior to collection.

OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

FERROUS IRON MEASUREMENTS

All field measurements are collected at time of sampling with a HACH test kit.

APPENDIX C

WASTE DISPOSAL DOCUMENT

NO. 641331

NON-HAZARDOUS WASTE DATA FORM

GENERATING SITE:

NAME SHELL OIL PRODUCTS US — SHELL OIL # — EPA I.D. NO. NOT REQUIRED

ADDRESS 20945 S. WILMINGTON — 8901 S. Atlantic Ave — PROFILE NO. 32100-18

CITY, STATE, ZIP CARSON, CA 90810 — South Gate, CA

ATTN: Joe Lenfoi — PHONE NO. ( )

CONTAINERS: No. _____ VOLUME 30 gal WEIGHT _____

TYPE: ☒ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION NON-HAZARDOUS GROUNDWATER — GENERATING PROCESS PURGED GROUNDWATER

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%	5. SAP#		
2. TPH		<1%	6. INCIDENT# 97517331		
3.			7. BESI#		
4.			8.		

PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: 24-HOUR EMERGENCY PHONE (800) 424-9300

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Chris Gordon — On behalf of SOP US — 11/30/04

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TRANSPORTER TO BE COMPLETED BY GENERATOR

NAME NIETO AND SONS TRUCKING, INC. — EPA I.D. NO.

ADDRESS 1281 BREA CANYON ROAD — FIRST TRANSPORTER

CITY, STATE, ZIP BREA, CALIFORNIA 92821 — Blaine Tech Services, Inc. 20755 Belshaw Avenue Carson, Ca 90746 (310) 885-4455

PHONE NO. (714) 990-6855 — SERVICE ORDER NO. _____

TRUCK, UNIT, I.D. NO. _____ — PICK UP DATE _____

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TSD FACILITY

NAME D/K ENVIRONMENTAL — EPA I.D. NO.

ADDRESS 3650 E. 26TH STREET — DISPOSAL METHOD

CITY, STATE, ZIP LOS ANGELES, CA 90023 — ☐ LANDFILL ☐ OTHER _____

PHONE NO. (323) 268-5056

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

GEN	OLD/NEW	L A	TONS
TRANS		S B	
C/O		RT/CD	HWDF NONE

DISCREPANCY

APPENDIX D

LABORATORY REPORT AND CHAIN-OF-CUSTODY DOCUMENTS

Calscience
Environmental
Laboratories, Inc.

December 06, 2004

Nick Sudano
Blaine Tech Services, Inc
20735 Belshaw Avenue
Carson, CA 90746-3509

Subject: **Calscience Work Order No.:** **04-12-0029**
Client Reference: **8901 S. Atlantic Blvd., South Gate, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/1/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Don Burley
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc		Date Received:	12/01/04
20735 Belshaw Avenue		Work Order No:	04-12-0029
Carson, CA 90746-3509		Preparation:	EPA 5030B
		Method:	DHS LUFT

Project: 8901 S. Atlantic Blvd., South Gate, CA

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-1	**04-12-0029-1**	**11/30/04**	**Aqueous**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	68	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	84	49-133			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-2	**04-12-0029-2**	**11/30/04**	**Aqueous**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	84	49-133			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-3	**04-12-0029-3**	**11/30/04**	**Aqueous**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	85	49-133			

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	**04-12-0029-4**	**11/30/04**	**Aqueous**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	82	49-133			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc		Date Received:	12/01/04
20735 Belshaw Avenue		Work Order No:	04-12-0029
Carson, CA 90746-3509		Preparation:	EPA 5030B
		Method:	DHS LUFT

Project: 8901 S. Atlantic Blvd., South Gate, CA

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**098-03-006-6,208**	**N/A**	**Aqueous**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	83	49-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc
20735 Belshaw Avenue
Carson, CA 90746-3509

Date Received: 12/01/04
Work Order No: 04-12-0029
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 8901 S. Atlantic Blvd., South Gate, CA

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-1	**04-12-0029-1**	**11/30/04**	**Aqueous**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	5.2	0.5	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	25	2	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
o-Xylene	ND	1.0	1		Ethanol	ND	100	1	
Methyl-t-Butyl Ether (MTBE)	1.7	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	82-136		1,2-Dichloroethane-d4	106	82-142	
Toluene-d8	97	80-116		1,4-Bromofluorobenzene	98	72-114	

MW-2	**04-12-0029-2**	**11/30/04**	**Aqueous**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.81	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
o-Xylene	ND	1.0	1		Ethanol	ND	100	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	82-136		1,2-Dichloroethane-d4	108	82-142	
Toluene-d8	99	80-116		1,4-Bromofluorobenzene	99	72-114	

MW-3	**04-12-0029-3**	**11/30/04**	**Aqueous**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	21	2	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
o-Xylene	ND	1.0	1		Ethanol	ND	100	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	82-136		1,2-Dichloroethane-d4	109	82-142	
Toluene-d8	98	80-116		1,4-Bromofluorobenzene	97	72-114	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Blaine Tech Services, Inc	Date Received:	12/01/04
20735 Belshaw Avenue	Work Order No:	04-12-0029
Carson, CA 90746-3509	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L

Project: 8901 S. Atlantic Blvd., South Gate, CA

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-4	**04-12-0029-4**	**11/30/04**	**Aqueous**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	2.2	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
o-Xylene	ND	1.0	1		Ethanol	ND	100	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	82-136		1,2-Dichloroethane-d4	106	82-142	
Toluene-d8	98	80-116		1,4-Bromofluorobenzene	97	72-114	

Method Blank	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
	099-10-006-12,799	**N/A**	**Aqueous**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
p/m-Xylene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
o-Xylene	ND	1.0	1		Ethanol	ND	100	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	82-136		1,2-Dichloroethane-d4	108	82-142	
Toluene-d8	98	80-116		1,4-Bromofluorobenzene	99	72-114	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc	Date Received:	12/01/04
20735 Belshaw Avenue	Work Order No:	04-12-0029
Carson, CA 90746-3509	Preparation:	EPA 5030B
	Method:	DHS LUFT

Project 8901 S. Atlantic Blvd., South Gate, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-12-0061-1	**Aqueous**	**GC 29**	**12/02/04**	**12/02/04**	**041202S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	76	79	70-112	4	0-17	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc		Date Received:	12/01/04
20735 Belshaw Avenue		Work Order No:	04-12-0029
Carson, CA 90746-3509		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project 8901 S. Atlantic Blvd., South Gate, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-4	**Aqueous**	**GC/MS T**	**12/01/04**	**12/02/04**	**041201S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	105	84-120	2	0-9	
Carbon Tetrachloride	105	106	71-137	0	0-10	
Chlorobenzene	107	106	87-111	2	0-8	
1,2-Dichlorobenzene	110	108	82-112	2	0-8	
1,1-Dichloroethene	99	96	76-130	3	0-18	
Toluene	108	106	85-115	2	0-8	
Trichloroethene	109	107	84-114	2	0-10	
Vinyl Chloride	93	89	68-128	4	0-16	
Methyl-t-Butyl Ether (MTBE)	110	109	63-135	1	0-20	
Tert-Butyl Alcohol (TBA)	83	93	25-169	11	0-41	
Diisopropyl Ether (DIPE)	105	104	70-130	1	0-11	
Ethyl-t-Butyl Ether (ETBE)	102	103	73-127	1	0-12	
Tert-Amyl-Methyl Ether (TAME)	93	93	71-125	0	0-12	
Ethanol	72	80	59-143	11	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc		Date Received:	N/A
20735 Belshaw Avenue		Work Order No:	04-12-0029
Carson, CA 90746-3509		Preparation:	EPA 5030B
		Method:	DHS LUFT

Project: 8901 S. Atlantic Blvd., South Gate, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-6,208	**Aqueous**	**GC 29**	**12/02/04**	**12/02/04**	**041202B01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	87	84	72-114	3	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc		Date Received:	N/A
20735 Belshaw Avenue		Work Order No:	04-12-0029
Carson, CA 90746-3509		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: 8901 S. Atlantic Blvd., South Gate, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-12,799	**Aqueous**	**GC/MS T**	**12/01/04**	**12/02/04**	**041201L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	106	87-117	1	0-6	
Carbon Tetrachloride	106	110	75-141	4	0-11	
Chlorobenzene	106	106	88-112	1	0-6	
1,2-Dichlorobenzene	109	109	88-112	0	0-6	
1,1-Dichloroethene	97	96	80-128	1	0-15	
Toluene	108	107	87-117	1	0-7	
Trichloroethene	109	108	86-116	1	0-8	
Vinyl Chloride	89	88	74-128	1	0-10	
Methyl-t-Butyl Ether (MTBE)	107	110	85-121	3	0-17	
Tert-Butyl Alcohol (TBA)	82	92	51-153	12	0-37	
Diisopropyl Ether (DIPE)	103	105	74-128	2	0-9	
Ethyl-t-Butyl Ether (ETBE)	102	104	81-123	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	93	96	81-123	3	0-9	
Ethanol	68	79	56-146	15	0-41	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 04-12-0029

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

LAB: Calscience

SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Joe Lentini

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 9 7 5 1 7 3 3 1

SAP or CRMT NUMBER (TS/CRMT):

DATE: 11/30/04

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services, Inc.	LOG CODE: BTST	SITE ADDRESS (Street and City): 8901 S. Atlantic, South Gate	GLOBAL ID NO.: T0603799315
ADDRESS: 20735 Belshaw Avenue, Carson, CA 90746		EDF DELIVERABLE & ADDITIONAL REPORT TO (Responsible Party or Designee): Britney Gunderson	PHONE NO.: 626-256-6662
PROJECT CONTACT (Hardcopy or PDF Report to): Nick Sudano		E-MAIL: bgunderson@deltaenv.com	CONSULTANT PROJECT NO.: BTS #041130-CG1
TELEPHONE: 310-885-4455	FAX: 310-637-5802	E-MAIL: nsudano@blainetech.com	SAMPLER NAME(S) (Print): Chris G.

LAB USE ONLY: 0029

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

Ethanol must be reported in micrograms per liter (ug/L)

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable (8015m)	BTEX (8260B)	MTBE (8021B)	MTBE (8260B)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol (8015B)	1,2-DCA (8260B)	EDB (8260B)		TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note
1	MW-1	11/30/04	954	W	4	X	X			X	X							
2	MW-2	↓	1006	↓	↓	X	X			X	X							
3	MW-3		903			X	X			X	X							
4	MW-4	↓	851	↓	↓	X	X			X	X							

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date: 12-01-04	Time: 10:45
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 12-01-04	Time: 12:05

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

Q&Q Graphic (714) 898-9702

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 04 - 12 - 0029

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: BLAINE TECH DATE: 12-01-04

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

3.1 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: RB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: RB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace	✓		
Tedlar bag(s) free of condensation			✓

Initial: RB

COMMENTS: